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(62) Document number(s) of the earlier application(s) in
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(54) **DYNAMIC OPTICAL ASSEMBLY FOR LASER-BASED ADDITIVE MANUFACTURING**

(57) A method and an apparatus of a powder bed fusion additive manufacturing system that enables a quick change in the optical beam delivery size and intensity across locations of a print surface for different powdered materials while ensuring high availability of the system. A dynamic optical assembly containing a set of lens assemblies of different magnification ratios and a me-

chanical assembly may change the magnification ratios as needed. The dynamic optical assembly may include a transitional and rotational position control of the optics to minimize variations of the optical beam sizes across the print surface.

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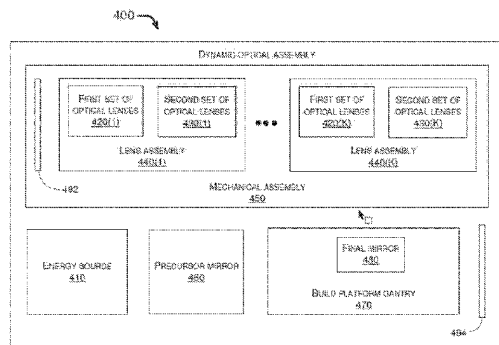


Fig. 4

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Place of search Berlin		Date of completion of the search 7 December 2023	Examiner Matos Gonçalves, M
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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